

When the processing machine is in operation, printing cylinder 1 rotates in the direction of rotation (direction of the arrow) so that at least one of applicator rollers 5, 6, 7 rolls over printing cylinder 1. When cylinder channel 10 passes the point of contact with at least one of applicator rollers 5, 6, 7, the jolt initiated by the edge of the cylinder channel is almost completely compensated as a result of the layer structure, particularly compressible layer 13, of applicator roller 5, 6, 7.

List of reference numbers

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| 1 | Printing cylinder (plate cylinder) |
| 2 | Rubber blanket cylinder |
| 3 | Inking unit |
| 4 | Moistening unit |
| 5 | Moisture-applicator roller |
| 6 | Ink-applicator roller |
| 7 | Varnish-applicator roller |
| 8 | Friction roller |
| 9 | Metering system |
| 10 | Cylinder channel |
| 11 | Pressure cylinder |
| 12 | Roller core |
| 13 | Compressible layer |
| 14 | Cover layer |
| 15 | Barrier layer |

Claims

1. Applicator device for a printing/varnishing unit in a processing machine with a printing cylinder with at least one cylinder channel and at least one applicator roller associated with the printing cylinder, characterized in that applicator roller (5, 6, 7) comprises a roller core (12), in that a compressible layer (13) of a cellular foamed material is arranged concentrically and firmly adhered onto roller core (12) and in that an elastic cover layer (14) carrying the medium to be processed is arranged firmly adhered onto compressible layer (13).

2. Applicator roller according to Claim 1, characterized in that applicator roller (5, 6, 7) is a moisture-applicator roller (5) in contact with printing cylinder (1).

3. Applicator roller according to Claim 1, characterized in that applicator roller (5, 6, 7) is at least one ink-applicator roller (6) in contact with printing cylinder (1).

4. Applicator roller according to Claim 1 and 3, characterized in that several ink-applicator rollers (6) are associated with printing cylinder (1) and in that at least the first and second applicator rollers (6) in the direction of rotation of printing cylinder (1) are in contact with a friction roller (8).

5. Applicator roller according to Claim 1, characterized in that applicator roller (5, 6, 7) is a varnish-applicator roller (7) in contact with printing cylinder (1).

6. Applicator roller according to Claim 1, characterized in that compressible layer (13) of applicator roller (5, 6, 7) is an open-pore foamed material.

7. Applicator roller according to Claim 1, characterized in that compressible layer (13) of applicator roller (5, 6, 7) is a closed-pore foamed material.

8. Applicator roller according to Claim 1, characterized in that compressible layer (13) of applicator roller (5, 6, 7) comprises a combination of open-pore and closed-pore foamed material.

9. Applicator roller according to Claim 1 and 7, characterized in that compressible layer (13) of applicator roller (5, 6, 7) comprises air or gas inclusions.

10. Applicator roller according to at least Claim 1, characterized in that applicator roller (5, 6, 7) can be pulled in the form of a casing onto roller core (12) as a sleeve, compressible layer (13) being concentrically arranged on a casing and cover layer (14) being arranged on compressible layer (13).

11. Applicator roller according to at least Claim 1 and 10, characterized in that applicator roller (5, 6, 7) comprises a barrier layer (15) between roller core (12) and compressible layer (13) or between the casing and compressible layer (13).

12. Applicator roller according to at least Claim 1, characterized in that layer (13) is arranged firmly adhered onto roller core (12) by means of a first vulcanization and cover layer (14) is arranged firmly adhered onto layer (13) by means of a second vulcanization.

Abstract

The invention pertains to an applicator device for a printing/varnishing unit in a processing machine. The invention is based on the problem of creating an applicator device of the type mentioned initially that avoids the occurrence of jolts of a cylinder channel, in particular, and that further increases the print quality. This is solved in that at least one applicator roller 5, 6, 7 is associated with cylinder channel 10 of printing cylinder 1. Applicator roller 5, 6, 7 consists of a roller core 12 on which at least one compressible layer 13 and a cover layer 14 are concentrically arranged.